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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,543	02/25/2000	Breck W. Lovinggood	ANCO-18US/119	6671

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EXAMINER	
VUONG, QUOCHIEN B	
ART UNIT	**PAPER NUMBER**
2685	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/513,543	LOVINGGOOD ET AL.	
	Examiner	Art Unit	
	Quochien B Vuong	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16,18-36,41,42 and 47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-16,18-36,41,42 and 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action in response to Applicant's response filed on 07/15/2004. Claims 1, 3-16, 18-36, 41, 42, and 47 are now pending in the present application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 3, 6, 10-13, 16, 18, 21-24, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karabinis (US 5,937,332) in view of Varieras (EP 0559557 A1) and Kawano et al. (US 4,972,346).

Regarding claims 1 and 16, Karabinis (figures 2-5A) discloses satellite repeater and a method of retransmitting a satellite signal inside a structure, comprising: receiving the satellite signal (figures 2-3; column 5, lines 6-9, and 55-57); amplifying and filtering the satellite signal (column 5, lines 9-12, and 59-63); and retransmitting the satellite signal inside the structure (figure 5A; column 7, lines 12-28). Karabinis does not specifically disclose the satellite signal is a GPS signal; down converting the GPS signal to an intermediate frequency (IF) signal; amplifying and filtering the IF signal, and up converting the IF signal to produce a radio frequency (RF) signal. However, Varieras discloses retransmitting a GPS satellite signal including amplifying, filtering, and down converting the GPS signal (see figure 3, and the English translation of the Abstract). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of retransmitting the GPS of Varieras to the satellite repeater and method of Karabinis for providing the location information to a mobile communication device inside the structure. The combination of Karabinis and Varieras does not specifically disclose down converting the GPS signal to an IF signal; amplifying and filtering the IF signal, and up converting the IF signal to produce the RF signal. However, Kawano et al. disclose amplifying of signal includes down converting the signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the satellite repeater and method of

Karabinis and Varieras for amplifying and filtering the signal in IF to obtain high amplification gain with low relative cost component.

Regarding claims 3 and 18, Karabinis disclose the RF signal is the second GPS signal (column 5, line 55 – column 6, line 10).

Regarding claim 6, Karabinis and Varieras disclose the method of claim 1; in addition, Karabinis discloses filtering the GPS signal (figures 3 and 4; column 5, lines 57-58).

Regarding claims 10 and 27, Karabinis (figures 2-5A) discloses satellite repeater and a method of retransmitting a satellite signal inside a structure, comprising: receiving the satellite signal (figures 2-3; column 5, lines 6-9, and 55-57); amplifying and filtering the satellite signal (column 5, lines 9-12, and 59-63); and retransmitting the satellite signal inside the structure (figure 5A; column 7, lines 12-28). Karabinis does not specifically disclose the satellite signal is a GPS signal; down converting the GPS signal to an intermediate frequency (IF) signal; amplifying and filtering the IF signal, and up converting the IF signal to produce second GPS signal. However, Varieras discloses retransmitting a GPS satellite signal including amplifying, filtering, and down converting the GPS signal (see figure 3, and the English translation of the Abstract). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of retransmitting the GPS of Varieras to the satellite repeater and method of Karabinis for providing the location information to a mobile communication device inside the structure. The combination of Karabinis and Varieras does not specifically disclose down converting the GPS signal to an IF signal; amplifying

and filtering the IF signal, and up converting the IF signal to produce the second GPS signal. However, Kawano et al. disclose amplifying of signal includes down converting the signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the satellite repeater and method of Karabinis and Varieras for amplifying and filtering the signal in IF to obtain high amplification gain with low relative cost component.

Regarding claim 11, Karabinis discloses the receiving is performed by a primary repeater (see figure 3, repeater 220).

Regarding claims 12 and 13, Karabinis discloses the primary repeater is coupled to an internal antenna by a transmission line, wherein the internal antenna performs the retransmitting (see figure 3, repeater 220, and antenna 290).

Regarding claim 21, Karabinis further discloses the amplifier includes a down converter for down converting the GPS signal to an intermediate frequency (IF) signal, a first amplifier for amplifying the IF signal, a filter for filtering the IF signal, a second amplifier for amplifying the IF signal and an up converter for up converting the IF signal to produce the second GPS signal (see figure 3).

Regardign claims 22 and 30, Karabinis discloses the amplifier includes a filter for filtering the GPS signal (figure 3).

Regarding claims 23 and 24, the rejection are the same as in claims 16, 18, and 20 above, wherein figure 5A of Karabinis discloses a primary repeater (210), and a secondary repeater (220).

Regarding claim 26, Karabinis discloses a secondary repeater (220 having a second link antenna for receiving 1he unlicensed frequency signal, a second down converter for down converting the unlicensed frequency signal to a second IF signal, a second amplifier for amplifying the second IF signal, a second up converter for up converting the second IF signal to a second GPS signal, and a second broadcast antenna for retransmitting the second GPS signal inside the structure (figure 6; column 6, line 62 – column 7, line 5).

Regarding claims 28 and 29, Karabinis discloses a housing containing the down converter, the amplifier and the up converter, the link antenna being connected to the housing by a transmission line; wherein the broadcast antenna is connected to the housing by a transmission line (see figure 3, repeater 220, and antenna 290).

3. Claims 4, 5, 7-9, 14-15, 19-20, 25, 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karabinis in view of Varieras and Kawano et al., and further in view of Karabinis et al. (US 6,134,437).

Regarding claims 4, 19, and 25, Karabinis, Varieras, and Kawano et al disclose the method and GPS repeater of claims 2, 17, and 23, respectively. Karabinis, Varieras, and Kawano et al. do not disclose the RF signal is an unlicensed frequency signal. However, Karabinis et al. disclose retransmitting satellite signal using an unlicensed

frequency signal (a short-range, low-power microwave link) (column 5, lines 35-62). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt unlicensed frequency signal of Karabinis et al. to the method of Karabinis, Varieras, and Kawano et al. to avoid signal interference and regulation by local government as suggested by Karabinis et al. (column 5, lines 55-62).

Regarding claims 5 and 20, Karabinis further discloses retransmitting the unlicensed frequency signal inside the structure (see figure 5A, signal from 210 to 220); and Kawano et al. disclose receiving the unlicensed frequency signal, down converting the unlicensed frequency signal to a second IF signal, amplifying the second IF signal, up converting the second IF signal to produce the second GPS signal (figure 6; column 6, line 62 – column 7, line 5).

Regarding claims 7, Karabinis (figures 2-5A) discloses a method of retransmitting a satellite signal inside a structure, the method comprising: receiving the satellite signal (figures 2-3; column (column 5, lines 6-9, and 55-57); amplifying and filtering the satellite signal to produce satellite signal (column 5, lines 9-12, and 57-63); and retransmitting the satellite signal inside the structure (figure 5A; column 7, lines 12-28). Karabinis do not specifically disclose the satellite signal is a GPS signal; down converting the satellite signal to an IF signal; amplifying and filtering the IF signal; and up converting the IF signal to produce an RF signal. However, Varieras discloses retransmitting a GPS satellite signal including amplifying, filtering, and down converting the GPS signal (see figure 3, and the English translation of the Abstract). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention

was made to adapt the teaching of retransmitting the GPS of Varieras to the satellite repeater and method of Karabinis for providing the location information to a mobile communication device inside the structure. The combination of Karabinis and Varieras does not specifically disclose amplifying and filtering the IF signal. However, Kawano et al. disclose amplifying of RF signal includes down converting the RF signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the method of Karabinis and Varieras for amplifying and filtering the IF signal to obtain high amplification gain with low relative cost component. The combination of Karabinis, Varieras, and Kawano et al. does not disclose the RF signal is an unlicensed frequency signal. However, Karabinis et al. disclose retransmitting satellite signal using an unlicensed frequency signal (a short-range, low-power microwave link) (column 5, lines 35-62). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt unlicensed frequency signal of Karabinis et al. to the method of Karabinis, Varieras, and Kawano et al. to avoid signal interference and regulation by local government as suggested by Karabinis et al. (column 5, lines 55-62).

Regarding claim 8, Karabinis further discloses the retransmitting the unlicensed frequency signal is between a primary repeater and the link antenna of a secondary repeater (figure 5A, signal from primary repeater 210 to a secondary repeater 220).

Regarding claim 9, Karabinis, Varieras, Kawano et al., and Karabinis disclose the method of claim 7; in addition, Karabinis discloses retransmitting the unlicensed frequency signal inside the structure (see figure 5A, signal from 210 to 220); and Kawano et al. disclose receiving the unlicensed frequency signal, down converting the unlicensed frequency signal to a second IF signal, amplifying the second IF signal, up converting the second IF signal to produce the second GPS signal (figure 6; column 6, line 62 – column 7, line 5).

Regarding claim 14, Karabinis (figures 2-5A) discloses a method of retransmitting a satellite signal inside a structure, the method comprising: receiving the satellite signal (figures 2-3; column (column 5, lines 6-9, and 55-57); amplifying and filtering the satellite signal to produce satellite signal (column 5, lines 9-12, and 57-63); and retransmitting the satellite signal inside the structure (figure 5A; column 7, lines 12-28); receiving the satellite signal and retransmitting the satellite signal (see figure 5A, signal from 210 to 220). Karabinis do not specifically disclose the satellite signal is a GPS signal; down converting the satellite signal to an IF signal; amplifying and filtering the IF signal; and up converting the IF signal to produce an unlicensed frequency signal. However, Varieras discloses retransmitting a GPS satellite signal including amplifying, filtering, and down converting the GPS signal (see figure 3, and the English translation of the Abstract). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of retransmitting the GPS of Varieras to the satellite repeater and method of Karabinis for providing the location information to a mobile communication device inside the structure. The

combination of Karabinis and Varieras does not specifically disclose amplifying and filtering the IF signal; and up converting the IF signal to produce an unlicensed frequency signal. However, Kawano et al. disclose down converting the RF signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the method of Karabinis and Varieras to obtain high amplification gain with low relative cost component. The combination of Karabinis, Varieras, and Kawano et al. does not disclose the RF signal is an unlicensed frequency signal. However, Karabinis et al. disclose retransmitting satellite signal using an unlicensed frequency signal (a short-range, low-power microwave link) (column 5, lines 35-62). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt unlicensed frequency signal of Karabinis et al. to the method of Karabinis, Varieras, and Kawano et al. to avoid signal interference and regulation by local government as suggested by Karabinis et al. (column 5, lines 55-62).

Regarding claim 15, Karabinis discloses the retransmitting the unlicensed frequency signal is between a primary repeater and the link antenna of a secondary repeater (figure 5A, signal from primary repeater 210 to secondary repeater 220).

Regarding claim 30, the rejection is the same as in claim 14 above, wherein figure 5A of Karabinis discloses a primary repeater (210), and a secondary repeater (220).

Regarding claim 31, Karabinis (figures 2-5A) discloses satellite repeater system for retransmitting a satellite signal inside a structure, comprising: a primary repeater (210) having a link antenna for receiving the satellite signal, (figures 2-3 and 5A; column 5, lines 6-9, and 55-57); amplifying and filtering the satellite signal (column 5, lines 9-12, and 59-63); and retransmitting the satellite signal inside the structure (figure 5A; column 7, lines 12-28); and a secondary repeater (220 having a second link antenna for receiving the retransmitted satellite signal, a second down converter for down converting the unlicensed frequency signal to a second IF signal, a second amplifier for amplifying the second IF signal, a second up converter for up converting the second IF signal to a second satellite signal, and a second broadcast antenna for retransmitting the second satellite signal inside the structure (figure 6; column 6, line 62 – column 7, line 5). Karabinis does not specifically disclose the satellite signal is a GPS signal; down converting the GPS signal to an intermediate frequency (IF) signal; amplifying and filtering the IF signal, and up converting the IF signal to produce an unlicensed frequency signal. However, Varieras discloses retransmitting a GPS satellite signal including amplifying, filtering, and down converting the GPS signal (see figure 3, and the English translation of the Abstract). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of retransmitting the GPS of Varieras to the satellite repeater and method of Karabinis for providing the location information to a mobile communication device inside the structure. The combination of Karabinis and Varieras does not specifically disclose down converting the GPS signal to an IF signal; amplifying and filtering the IF signal,

and up converting the IF signal to produce the RF signal. However, Kawano et al. disclose amplifying of signal includes down converting the signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the satellite repeater and method of Karabinis and Varieras for amplifying and filtering the signal in IF to obtain high amplification gain with low relative cost component. The combination of Karabinis, Varieras, and Kawano et al. does not disclose the RF signal is an unlicensed frequency signal. However, Karabinis et al. disclose retransmitting satellite signal using an unlicensed frequency signal (a short-range, low-power microwave link) (column 5, lines 35-62). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt unlicensed frequency signal of Karabinis et al. to the GPS repeater system of Karabinis, Varieras, and Kawano et al. to avoid signal interference and regulation by local government as suggested by Karabinis et al. (column 5, lines 55-62).

Regarding claims 32-35, the combination Karabinis, Suemitsu, Kawano et al., and Karabinis et al. does not specifically disclose the unlicensed frequency signal is about 2.4 GHz, 902-928 MHz, the GPS signal is about 1.5 GHz, or the IF signal is about 140-160 MHz. However, the examiner takes Official notice that it is well known to use the unlicensed frequency signal about 2.4 GHz, 902-928 MHz, the GPS signal is about 1.5 GHz, or the IF signal is about 140-160 MHz. Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the

well known unlicensed frequencies, GPS frequency, and IF to the repeater system of Karabinis, Suemitsu, Kawano et al., and Karabinis et al. as a system design preference for use with standard equipment.

4. Claims 36, 41, 42, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karabinis (US 5,937,332) in view of Kawano et al. (US 4,972,346) and Karabinis et al. (US 6,134,437).

Regarding claim 36, Karabinis (figures 2-5A) discloses a method of retransmitting a satellite signal inside a structure, the method comprising: receiving the satellite signal (figures 2-3; column (column 5, lines 6-9, and 55-57); amplifying and filtering the satellite signal to produce a second signal (column 5, lines 9-12, and 57-63); and retransmitting the second signal inside the structure (figure 5A; column 7, lines 12-28); receiving the second signal and retransmitting the second signal (see figure 5A, signal from 210 to 220). Karabinis do not specifically disclose down converting the satellite signal to an IF signal; amplifying and filtering the IF signal; and up converting the IF signal to produce an unlicensed frequency signal. However, Kawano et al. disclose down converting the RF signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the method of Karabinis to obtain high amplification gain with low relative cost component. The combination of Karabinis and Kawano et al. does not disclose the RF signal is an

unlicensed frequency signal. However, Karabinis et al. disclose retransmitting satellite signal using an unlicensed frequency signal (a short-range, low-power microwave link) (column 5, lines 35-62). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt unlicensed frequency signal of Karabinis et al. to the method of Karabinis and Kawano et al. to avoid signal interference and regulation by local government as suggested by Karabinis et al. (column 5, lines 55-62).

Regarding claim 42, Karabinis (figures 2-5A) discloses satellite repeater system for retransmitting a satellite signal inside a structure, comprising: a primary repeater (210) having a link antenna for receiving the satellite signal, (figures 2-3 and 5A; column 5, lines 6-9, and 55-57); a circuit for amplifying and filtering the satellite signal (column 5, lines 9-12, and 59-63); and a broadcast antenna for retransmitting the satellite signal inside the structure (figure 5A; column 7, lines 12-28); and a secondary repeater (220 having a second link antenna for receiving the retransmitted satellite signal, a second down converter for down converting the unlicensed frequency signal to a second IF signal, a second amplifier for amplifying the second IF signal, a second up converter for up converting the second IF signal to a second satellite signal, and a second broadcast antenna for retransmitting the second satellite signal inside the structure (figure 6; column 6, line 62 – column 7, line 5). Karabinis does not specifically disclose down converting the satellite signal to an intermediate frequency (IF) signal; amplifying and filtering the IF signal, and up converting the IF signal to produce an unlicensed frequency signal. However, Kawano et al. disclose amplifying of signal includes down

converting the signal to an IF signal, amplifying and filtering the IF signal, and up converting the IF signal back to RF signal (figure 6; column 6, line 62 – column 7, line 5). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kawano et al. to the repeater system of Karabinis for amplifying and filtering the signal in IF to obtain high amplification gain with low relative cost component. The combination of Karabinis and Kawano et al. does not disclose the RF signal is an unlicensed frequency signal. However, Karabinis et al. disclose retransmitting satellite signal using an unlicensed frequency signal (a short-range, low-power microwave link) (column 5, lines 35-62). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt unlicensed frequency signal of Karabinis et al. to the GPS repeater system of Karabinis and Kawano et al. to avoid signal interference and regulation by local government as suggested by Karabinis et al. (column 5, lines 55-62).

Regarding claims 41 and 47, Karabinis, Kawano et al., and Karabinis et al. disclose the method and repeater of claims 36 and 42, respectively. The combination of Karabinis, Kawano et al., and Karabinis et al. does not disclose the satellite signal is a digital radio signal. However, examiner takes Official notice that it is well known to use a digital radio signal in satellite communication. Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the well known digital radio signal to satellite signal in the repeater system of Karabinis, Kawano et al., and Karabinis et al. for reducing signal interference and providing higher bandwidth.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 3-16, 18-36, 41, 42, and 47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B Vuong whose telephone number is (703) 306-4530. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quochien B. Vuong

QUOCHIEN B. VUONG
PRIMARY EXAMINER

Quochien B. Vuong
Jan. 06, 2005.